



**King County**

**OFFICE OF ECONOMIC AND FINANCIAL ANALYSIS**

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July 13, 2010

Honorable Members of the Forecast Council:

We are honored to submit for adoption the final revenue forecasts for the 2011 King County budget. As we begin to climb out of the recession, we can expect fiscal 2011 will be a year of positive but slow economic recovery in King County, producing another challenging year for revenues.

Each revenue topic contains a brief discussion of the relevant take-aways and at-a-glance summary forecasts. Preceding the actual forecasts will be a discussion of the economic context. Detailed tables of all revenue and inflation forecasts have been sent as a separate Excel workbook.

We look forward to working with you in the coming days.

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Chief Economist

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Economist

# FINAL REVENUE FORECASTS FOR THE 2011 KING COUNTY BUDGET

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## **The Economic Context**

It is important to have a perspective on the economy in order to put the revenue forecasts and the budget process in their proper context.

### **The Bond Market: Taking the Pulse of the Economy**

Recently there have been many headlines warning of new crises just around the corner. It is hard for anyone to get a sense of what is a real threat and what is overblown in the press. One good way to take the pulse of the economy is to look at key interest rate spreads in the bond market. Bonds are less exciting than stocks because they are driven less by emotion. In this case, less excitement translates into more information that is useful. Besides, there is 50% more money invested in bonds than stocks.

There are three threats that have been mentioned the most often. We will look at them through the lens of interest rate spreads.

### **A Double-Dip Recession?**

The threat of a double-dip recession is on the tip of many of commentators' tongues. One technical definition is that a double-dip will occur if GDP falls back into negative growth for two quarters in a row as it did in 2008-9. An excellent predictor of recessions is the spread between the yield on the 10-year Treasury note and the 3-month T-Bill. Usually, the yield on 10-year Treasuries is greater than T-Bill rates because investors require a higher return to tie up their capital for 10 years given all the investment opportunities available. However, when investors see a storm coming they head for shelter in safe Treasuries, which has the effect of pushing down the yields to below the T-Bill. When the yield curve is thus "inverted" (yield on the 10-year less than the T-Bill), it has preceded every recession since WWII except one. Chart 1 below shows that a negative or inverted spread was accurate in predicting the last two recessions.

This indicator shows no sign of a second recession now, however, as the spread is well within positive territory, with over 3% difference between the 10 year and 3 month yields. This is not a perfect indicator, but we feel it is persuasive nonetheless.

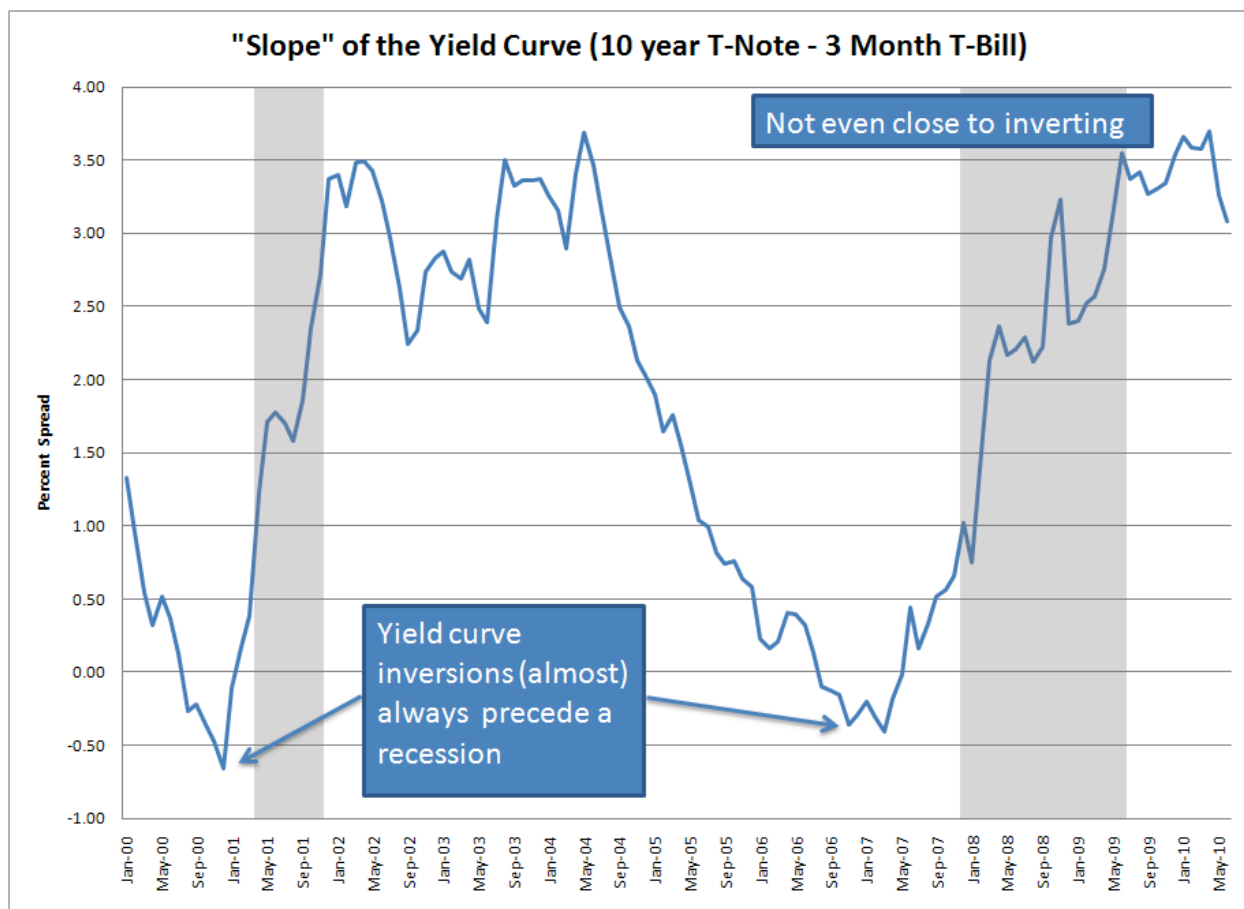


Chart 1

### The Greek Crisis?

Next, we turn to the recent events in Greece and the Eurozone. The worry is that the risk of a sovereign government in Europe defaulting on its debt could spread to all of Europe and ultimately to the United States like a contagious disease, setting off another meltdown in the credit markets similar to what happened when Lehman failed. To see what US bond investors think about that prospect, we look at the spread between the US 3 month Libor and 3 month T-Bill yields, known for historical reasons as the “TED spread.” Libor stands for London Interbank Offering Rate; it is the rate big banks charge each other for a 3-month loan. Since there is some risk in banks repaying each other, while there is no risk with the Treasury, the difference in yields is a measure of how much confidence there is in the creditworthiness of large financial institutions.

Chart 2 shows the TED spread going back to 2000. Through most of the decade, we can see that normally the spread is well below 1%. When the sub-prime crisis hit in 2007 the spread climbed above 1%, and it spiked sharply in the wake of the Lehman failure. More recently, we can see a blip up from the Greek crisis, but the spread remains well under 1% and very small compared to those past events. This demonstrates that investors are not too worried about a contagious spread of Greece’s problems.

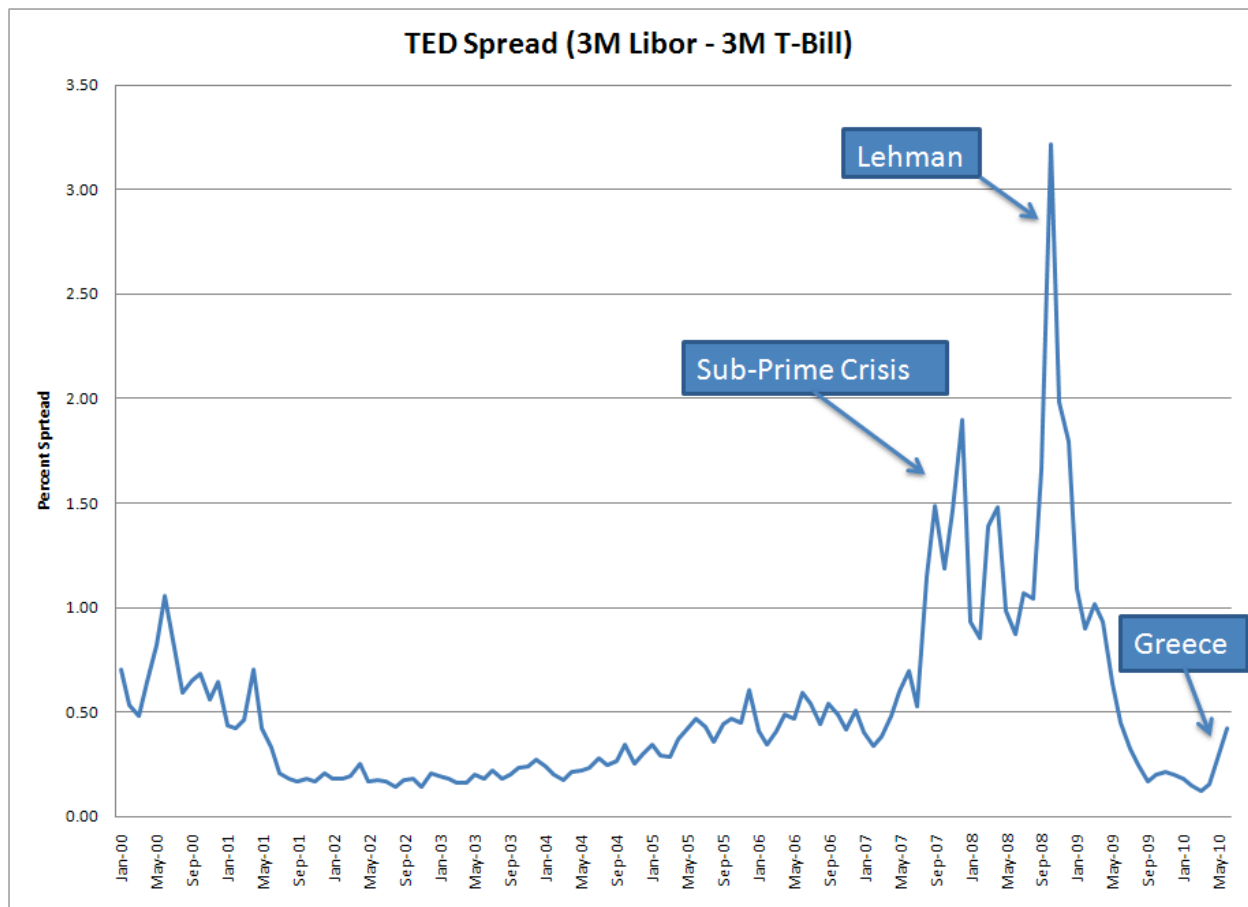


Chart 2

### The National Debt?

Finally, we have heard a lot about deficits and the national debt and how the markets need reassurance that Congress and the President will fix it. If they do not get that reassurance, something bad will happen to the markets and recovery. To be sure, the advancing mountain of entitlement spending does require a convincing plan to be put in place over the next couple of years, most likely using some combination of benefit cuts and revenue enhancements. However, how much reassurance do the markets really need right now? To answer that question one has to look at the implications of a worst-case scenario and see how investors are incorporating that risk (or not) into their portfolios.

A worst-case scenario would be that Washington (the other Washington) is too gridlocked to do anything about the mounting debt and in a few years time the debt expands to where just the interest alone would be more than \$1 trillion a year. In that case, there are only two options. One is for the Treasury to default on interest payments. If this were perceived as a real risk, we would not see 10 year and 30-year Treasury yields as low as they currently are. Investors would demand much higher compensation for the default risk.

The second, more realistic, option is that the Federal Reserve would pay the interest with printed money. That would result in a return to double-digit inflation. To check whether that fear is incorporated into the bond market we look at the spread between the 10-year Treasury note and the 10-year “TIPS.” TIPS stands for Treasury Inflation Protected Security; it is the same as a 10-year Treasury note except that it indexes the return to the CPI. The difference in the yields is called “break-even inflation” as it is the rate of inflation that would make investing in either security have the same return after 10 years. This spread represents a good measure of inflation expectations incorporated into the market.

Chart 3 shows breakeven inflation going back to 2003. We can see that during the height of the recession there was a real fear of deflation as breakeven inflation almost went to zero. Currently we are seeing a breakeven rate of inflation of around 2.2%. If there were real fears of gridlock preventing any solution to the debt problem we would expect to see a much larger rate. Although indirect, we feel this is strong evidence against the deficit/debt problem immediately threatening the current recovery.

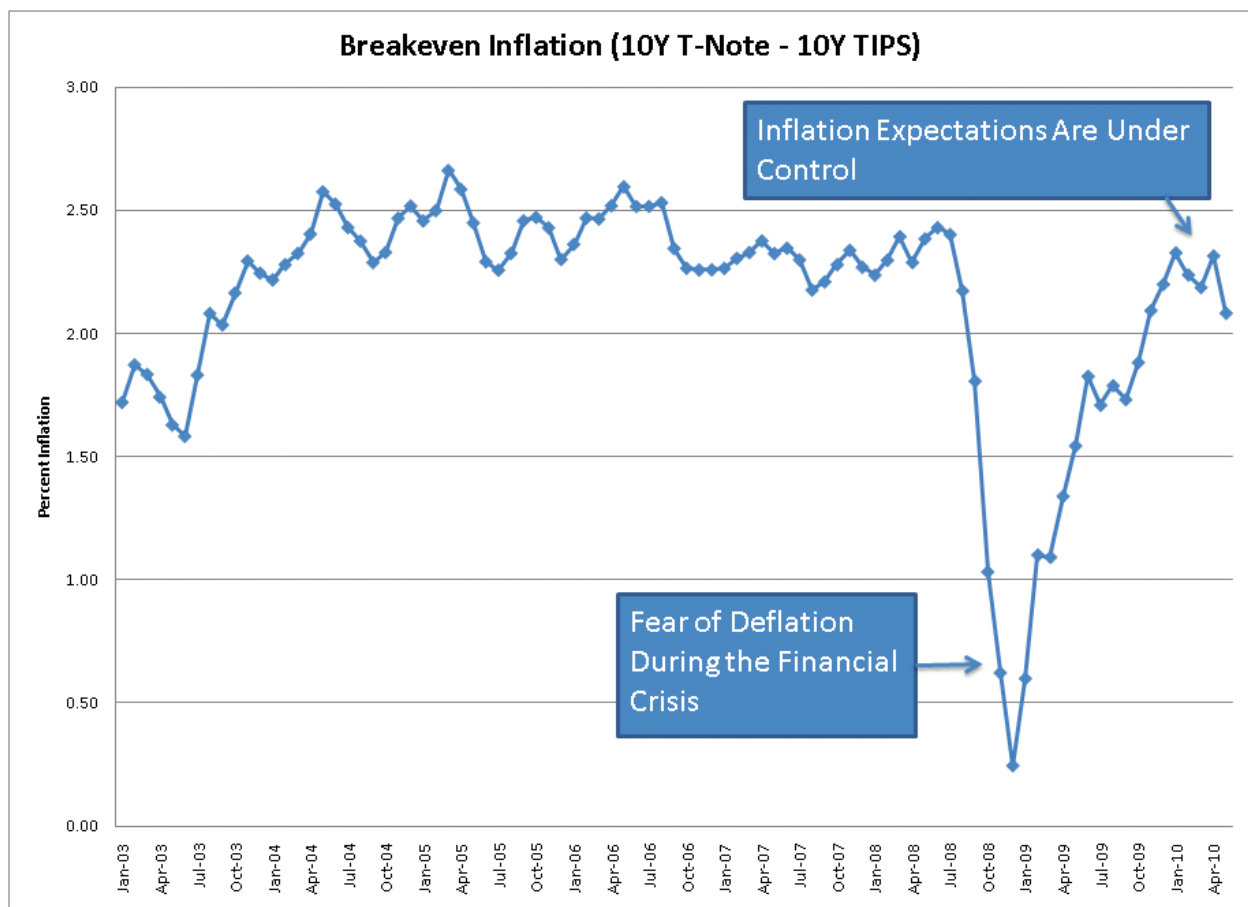


Chart 3

### **Challenges to King County**

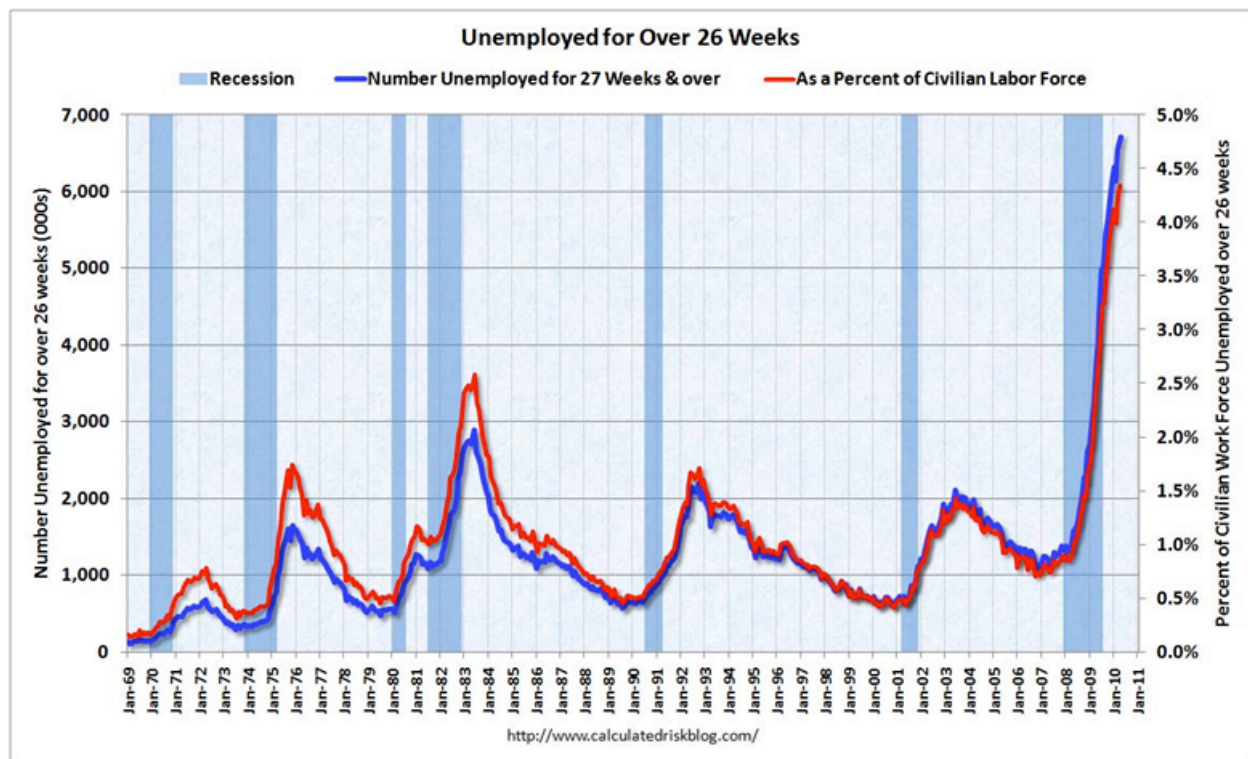
It is clear that some of the scariest stories about a double-dip recession, the Greek crisis, and the Federal debt are overblown. However, there are some real challenges ahead in the recovery that has implications for King County revenues. The largest of these are employment and real estate.

#### **Employment**

Chart 4 shows one way this recession is different. The unemployed are finding it is taking much longer to find new jobs than in past recessions. There are two reasons for this. First is the simultaneous occurrence of a housing crisis. In past recessions, the unemployed would pack up and move to whatever city had a good job that fit. This is not so true in this recession, however. If one's house is underwater then there will be no equity to put down on a house in a new town. Even if the house is not underwater, there is a reluctance to realize a reduction in the value of a house through a sale. This has caused many of the unemployed to stay put and confine their job search to within commuting distance.

The second reason is that many of the jobs eliminated will not be coming back, at least any time soon. This is especially true of jobs lost in construction, manufacturing and financial services. We have seen these national trends reflected in King County and it is likely to get worse before it gets better.

Drilling down to the demographics of the long-term unemployed shows that the largest group consists of people who are over 45 and college educated. Their average job search is 36 weeks. This affects the prospects for future revenues for the County. Most of these folks have mortgages and after so long without a job they are struggling to make the payments. We can expect to see more foreclosures, which will undercut the recovery in real estate. In addition, they are not spending any more than they have to so this slows the rebound in retail sales.



**Chart 4**

Yet there is good news in the employment picture: King County has turned the corner and is no longer shedding jobs on balance. Chart 5 shows that the turnaround began at the beginning of the year kick-started by hiring for the Census. We expect a drop-off in hiring once the census workers are returned to the labor force. After that there will be slow but positive growth in jobs.

As Chart 5 shows, King County was late in being affected by the recession, but still has shed more than 75,000 jobs since the middle of 2008. It will be to the end of 2012 or beginning of 2013 before all the lost jobs are made back. In addition, there will be normal entries into the labor market from graduates that will need jobs.

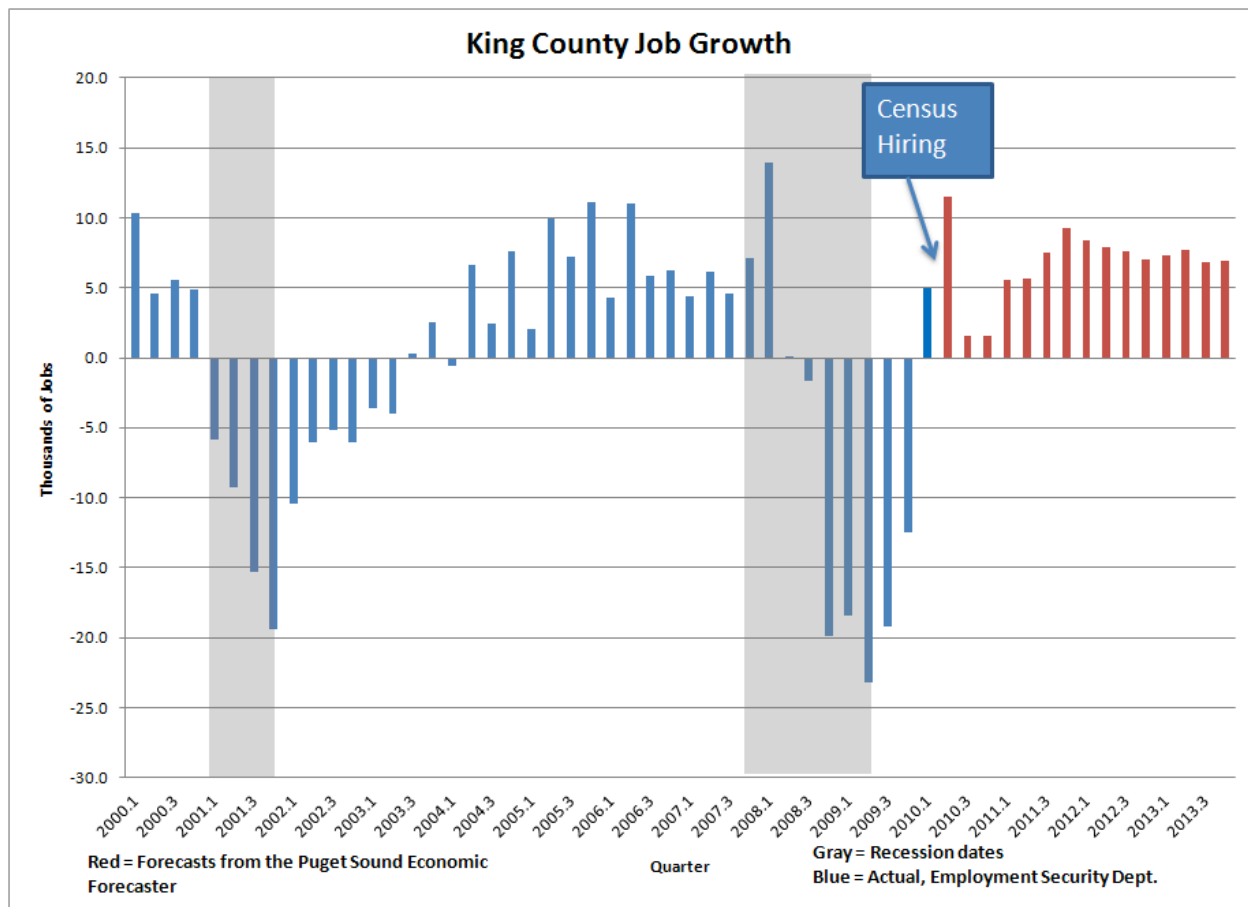


Chart 5

### Real estate

Turning to real estate, in March we were hopeful that house prices in the Puget Sound area had bottomed out and a modest turnaround in new construction might occur. We are less optimistic now. Chart 6 shows the most recent Case-Shiller index of single-family house prices for the largest 10 cities of the US and Seattle (actually the three urban counties of the Puget Sound region). There has been an uptick lately but there is wide consensus that government incentive programs have driven this. Once these programs unwind, we expect to see a drop off in sales, which in turn will exert downward pressure on prices.

Additional factors weighing down on the real estate market are the large actual and “shadow” inventory of properties. The shadow inventory contains the properties that financial institutions and individuals are holding off the market, waiting for prices to move up sufficiently to show a profit. No one knows how large this shadow inventory is, but it is likely large enough that every uptick in prices will result in more property coming onto the market, which will tend to push prices back down again. That in turn will keep some of the inventory off the market until prices come up again, and so forth. Working through the inventory in this up-and-down way could take years. Commercial rents and prices will be under pressure as well due to the very high vacancy rates. New construction will likely remain depressed during this period of working through inventory. The good news is that the consensus amongst forecasting services is for a snap back



in real estate to occur starting in 2013, when the inventory is finally depleted and pent up demand gets the construction sector moving again.

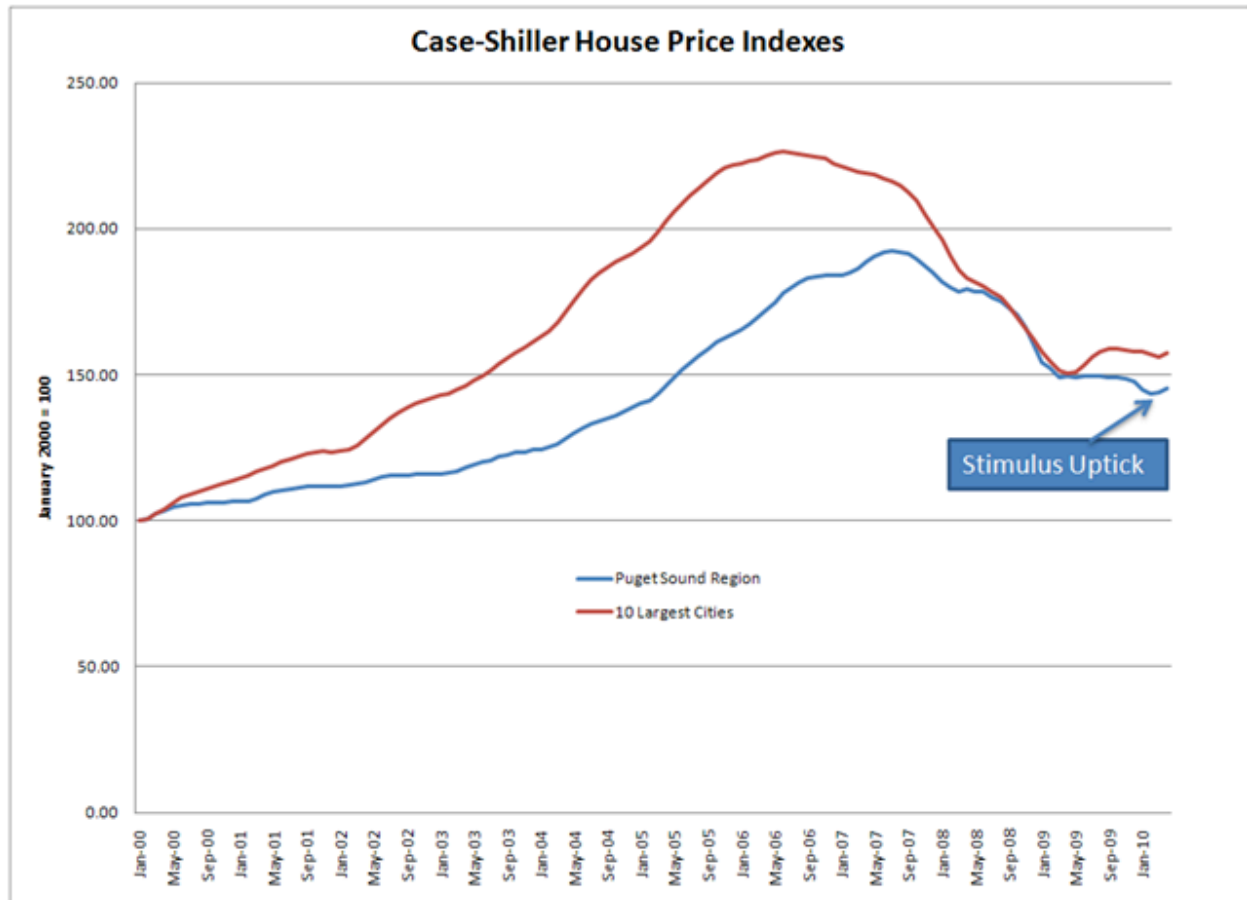


Chart 6

### Conclusion: Recovery at half speed

While some of the most pessimistic stories we are hearing are probably overblown, the local economy is in for a slow and difficult recovery. We look for the employment situation to improve steadily, but it will take several years before we are back to the employment levels of 2007. The construction sector has been particularly hard hit and it will likely remain in a reduced state for some time. The revenue forecasts that follow reflect this outlook.

## FINAL REVENUE FORECASTS FOR 2011

This section contains the main highlights of the revenue and inflation forecasts. A more complete set of forecasts is contained in a separate Excel workbook. The forecasts are made with the following assumptions:

- The forecasts are constructed with a 65% level of confidence as required by the Forecast Council. This means that there is a 65% chance that actual revenues will exceed forecasted, and only a 35% chance that actual will fall below forecasted. (Since inflation is a cost, confidence level is reversed to a 65% chance that actual inflation will be below forecasted). This is different from a more typical expected value forecast, which would be at the 50% confidence level.
- All proposed annexations are assumed to occur as scheduled through 2015 as requested by Budget Director Dively. This is a departure from our preliminary forecasts where only those annexations with a hard date were assumed. Since some of these additional annexations are subject to voter approval, they may not occur or may occur later than assumed. This makes the forecasts very conservative.
- No proposed changes to the tax code are assumed. Rates that are on the books now are assumed to stay fixed throughout the forecast horizon.

*The forecasts that are produced under these assumptions are very conservative.*

### Property Taxes: Assessed Valuation and New Construction

Last year, assessments were down almost 12%. As of this writing, a little more than a third of assessments have been completed for this year. (These assessments, backdated to January 1, 2010, will apply to the 2011 tax rolls.) It is clear that they will be down again, but not nearly as much as last year. In addition, while the residential sector suffered a greater decline than last year, it is likely the commercial sector's turn to have the greater decline. The recovery in valuations should begin in tax year 2013 and reach full recovery to 2009 levels in 2014-15.

**Table 1 – Assessed Valuation - Countywide**

Year	Value	Change
2008	340,995,439,577	14.14%
2009	386,889,727,909	13.46%
2010	341,971,517,465	-11.61%
2011	320,622,216,647	-6.24%
2012	323,763,240,641	0.98%
2013	341,464,505,586	5.47%

Last March, we looked for a modest turn-around in new construction, but our outlook has been dimmed by continuing signs of weakness such as large inventories of empty office space and foreclosed properties. As with assessed valuations, we do not expect a turn-around until 2013-14.

**Table 2 – New Construction - Countywide**

Year	Value	Change
2008	6,663,100,000	11.98%
2009	8,005,200,000	20.14%
2010	5,205,200,000	-34.98%
2011	3,638,204,200	-30.10%
2012	2,676,631,266	-26.43%
2013	2,792,747,386	4.34%

## **Sales Taxes**

Sales tax revenues will begin to recover in 2011 in line with the recovery of the King County economy. We expect more than a 9% increase in retail sales in King County in 2011, although from a low base from the previous year. Annexations will impact the General Fund and several other funds, reducing the amounts received by the County. The combination of a slow recovery and annexations means that sales tax revenue to the General Fund will not regain its pre-recession level until 2015.

We forecast the sales and use tax base, i.e., retail sales, other sales and use expenditures, with our econometric model; then we input those forecasts into spreadsheets that calculate the appropriate amounts for each sales tax revenue category. The revenue categories that are countywide naturally grow in lockstep with the tax base, aside from adjustments for mitigation and delinquency payments; they are the Transit tax and the Mental Illness & Drug Dependency tax. The revenues that are a function of jurisdiction – incorporated versus unincorporated – will grow at a different, generally slower, rate; they are the General Fund, Children & Family Services and Criminal Justice.

**Table 3 – Sales & Use Tax Base**

Year	Value	Change
2008	47,440,908,710	-3.71%
2009	40,783,082,660	-14.03%
2010	39,258,298,515	-3.74%
2011	42,865,193,062	9.19%
2012	45,435,967,162	6.00%
2013	48,508,919,971	6.76%

**Chart 4 – General Fund + Children & Family Services Revenues**

Year	Value	Change
2008	87,672,896	-4.61%
2009	76,142,480	-13.15%
2010	72,781,468	-4.41%
2011	78,096,055	7.30%
2012	80,133,612	2.61%
2013	84,742,732	5.75%

**Table 5 – Transit Tax Revenues**

Year	Value	Change
2008	432,934,213	-2.06%
2009	376,904,266	-12.94%
2010	363,128,019	-3.66%
2011	396,490,761	9.19%
2012	420,269,685	6.00%
2013	448,693,618	6.76%

**Table 6 – Mental Illness & Drug Dependency Revenues**

Year	Value	Change
2008	35,564,904	-
2009	41,773,812	17.46%
2010	40,348,466	-3.41%
2011	44,055,520	9.19%
2012	46,697,682	6.00%
2013	49,855,968	6.76%

**Table 7 – Criminal Justice**

Year	Value	Change
2008	12,973,186	-8.83%
2009	11,086,865	-14.54%
2010	10,222,332	-7.80%
2011	10,381,434	1.56%
2012	10,360,031	-0.21%
2013	10,369,651	0.09%

**Hotel/Motel and Rental Car Taxes**

The recession has naturally affected the volume of business travel and tourism in King County. We have revised our projections downward from last March and are now projecting that this revenue source, like many others, will not return to pre-recession levels until 2014 at the earliest.

**Table 8 - Hotel/Motel Tax Revenue**

Year	Value	Change
2008	20,701,685	1.02%
2009	16,892,478	-18.40%
2010	17,077,156	1.09%
2011	17,396,900	1.87%
2012	17,825,523	2.46%
2013	18,823,512	5.60%

**Table 9 – Rental Car Tax Revenue**

Year	Value	Change
2008	2,835,443	0.00%
2009	2,651,750	-6.48%
2010	2,533,385	-4.46%
2011	2,647,520	4.51%
2012	2,706,536	2.23%
2013	2,830,237	4.57%

**Real Estate Excise Taxes**

REET is essentially a sales tax on real estate transactions and thus will follow developments in the real estate market. The strongest leading indicators of future transactions are trends in house prices, both at the national and local level, mortgage rates, single-family housing construction and housing permits. We are seeing a blip up in REET currently, driven by government incentive programs that have ended, which we believe will lead to a drop-off going forward. In addition, REET revenues received by the County will be reduced by annexations.

**Table 10 – Real Estate Excise Tax Revenue**

Year	Value	Change
2008	4,912,082	-46.62%
2009	3,809,800	-22.44%
2010	4,376,804	14.88%
2011	3,818,100	-12.77%
2012	3,184,734	-16.59%
2013	3,242,566	1.82%

**Inflation**

The inflation outlook is benign for now: a bright spot for the County budget. The September-to-September CPI-W (office workers and wage earners) is the basis for calculating Cost-of-Living-Allowances (COLAs) for many union contracts with the County. Note that this way of calculating inflation – September-to-September – makes the rate of inflation very volatile compared to a 12-month average.

Other price indexes forecasted are the CPI-U (all urban dwellers), the CPI for Seattle, the producers' price index for pharmaceuticals and the CPI-U for transportation.

**Table 11 – CPI-W – US – Sep-to-Sep**

Year	Value	Change
2008	5.42%	2.65%
2009	-1.68%	-7.10%
2010	1.48%	3.16%
2011	1.36%	-0.12%
2012	2.23%	0.87%
2013	2.35%	0.12%

**Table 12 – CPI-U – US – 12 Month Average**

Year	Value	Change
2008	3.82%	0.95%
2009	-0.32%	-4.14%
2010	1.80%	2.12%
2011	1.70%	-0.10%
2012	2.40%	0.70%
2013	2.50%	0.10%

**Table 13 – CPI-U – Seattle – 12 Month Average**

Year	Value	Change
2008	4.32%	0.48%
2009	0.57%	-3.75%
2010	1.41%	0.84%
2011	1.78%	0.36%
2012	2.53%	0.75%
2013	2.74%	0.22%

**Table 14 – PPI – Pharmaceuticals – 12 Month Average**

Year	Value	Change
2008	6.87%	2.15%
2009	7.18%	0.31%
2010	7.54%	0.36%
2011	9.61%	2.07%
2012	10.82%	1.21%
2013	10.33%	-0.49%



**Table 15 – CPI-U – Transportation – 12 Month Average**

Year	Value	Change
2008	5.88%	3.77%
2009	-8.33%	-14.22%
2010	2.72%	11.05%
2011	1.14%	-1.57%
2012	2.79%	1.65%
2013	2.59%	-0.20%

**The Investment Pool Rate of Return**

The pool's return has been very low over the last couple of years and the outlook is for that to continue for another two years. The shortness of the pool's weighted average maturity means that the Federal Funds Rate will be the most important factor driving the pool's yield and net return. There is wide agreement that the Fed will raise its rates, but disagreement over when, how fast and how far. Given the recent weakness in the national economic data, our view is that the Fed will begin to raise rates gradually at the end of 2011 or beginning of 2012. This forecast assumes that the portfolio will remain in its defensive stance with short maturities and only government issues. If maturities should lengthen or commercial paper added, then the returns would be adjusted upwards.

**Table 16 – Investment Pool Net Rate of Return**

Year	Value	Change
2008	3.30%	-1.79%
2009	1.75%	-1.54%
2010	0.84%	-0.91%
2011	1.08%	0.23%
2012	1.54%	0.47%
2013	2.18%	0.63%

## Summary

Fiscal year 2011 will be a continuation of the ongoing economic recovery in King County, producing a mixed outlook for revenues.

- Assessed valuations and new construction will continue to decline in 2011. Resurgence in this market is expected in 2-4 years.
- Revenue from Real Estate Excise Taxes will decline as well, in part, because of annexations.
- Sales tax revenues will steadily increase in all categories. Some categories, notably the General Fund, will see annexations slowing those increases.
- Inflation will be low, keeping cost-of-living salary adjustments low as well.
- The net rate of return to the investment pool will be held down by low yields in the market, but will move up in lock step with Fed rate increases.
- Hotel and rental car sales tax revenues will see increases as business travel and tourism pick up.

**King County has turned the corner into full recovery mode. However, it will be three years before we are fully recovered.**